

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Claims 1-5 (canceled)

Claim 6 (original): A method for producing molybdenum metal, comprising heating a precursor material to a first temperature in the presence of reducing gas, said first temperature being in a range of about 540°C to about 600°C, increasing said first temperature at least once to reduce said precursor material and form said molybdenum metal, and cooling said molybdenum metal at a substantially constant pressure.

Claim 7 (original): The method of claim 6, wherein said first temperature is increased to a second temperature in a range of about 760°C to about 820°C.

Claim 8 (original): The method of claim 7, wherein said second temperature is increased to a third temperature in a range of about 980°C to about 1050°C.

Claim 9 (original): The method of claim 6, wherein said first temperature is increased to a second temperature of about 750°C.

Claim 10 (original): The method of claim 6, wherein said first temperature is increased to a second temperature in a range of about 750°C to about 820°C.

Claim 11 (original): The method of claim 10, wherein said second temperature is increased to a third temperature of about 850°C.

Claim 12 (original): The method of claim 10, wherein said second temperature is increased to a third temperature in a range of about 850°C to about 1050°C.

Claim 13 (original): A method for producing molybdenum metal, comprising heating a precursor material at a constant pressure to a first temperature in the presence of a reducing

gas, said first temperature in a range of about 540°C to 600°C, and increasing said first temperature at least once to reduce said precursor material and form said molybdenum metal.

Claim 14 (original): The method of claim 13, wherein said first temperature is increased to a second temperature in a range of about 760°C to about 820°C.

Claim 15 (original): The method of claim 14, wherein said second temperature is increased to a third temperature in a range of about 980°C to about 1050°C.

Claim 16 (original): The method of claim 13, wherein said first temperature is increased to a second temperature of about 750°C.

Claim 17 (original): The method of claim 13, wherein said first temperature is increased to a second temperature in a range of about 750°C to about 820°C.

Claim 18 (original): The method of claim 17, wherein said second temperature is increased to a third temperature of about 850°C.

Claim 19 (original): The method of claim 17, wherein said second temperature is increased to a third temperature in a range of about 850°C to about 1050°C.

Claims 20-30 (canceled).